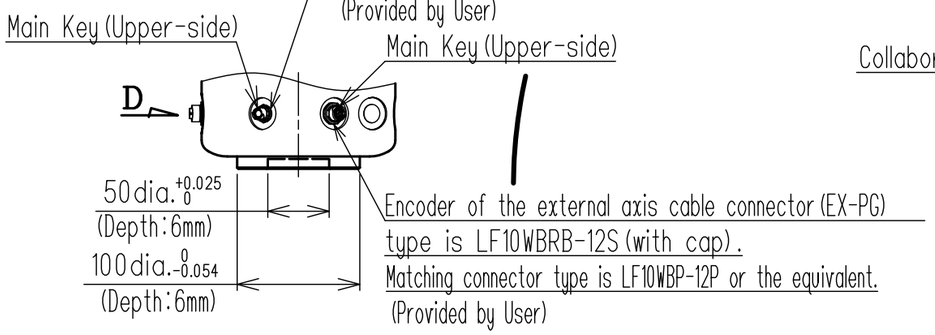
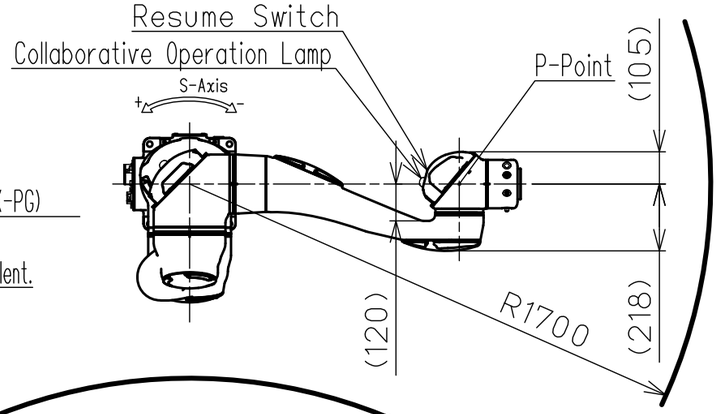
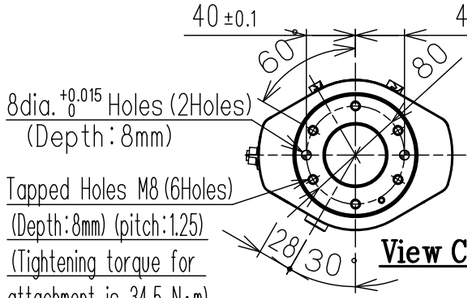
DWG.NO. HW1386262

Type	Specification
YR-1-06VXHC20-B12	With Direct Teach Buttons IP67 Dust and Drip Proof Specification Built-in External Axis, Ethernet and I/O Cables (8 wires)

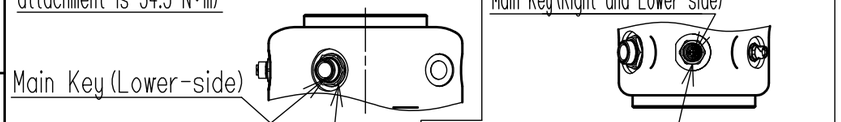
Power cable of the external axis cable connector (EX-PW) type is LF07WBRB-6S (with cap).
Matching connector type is LF07WBP-6P or the equivalent.
(Provided by User)



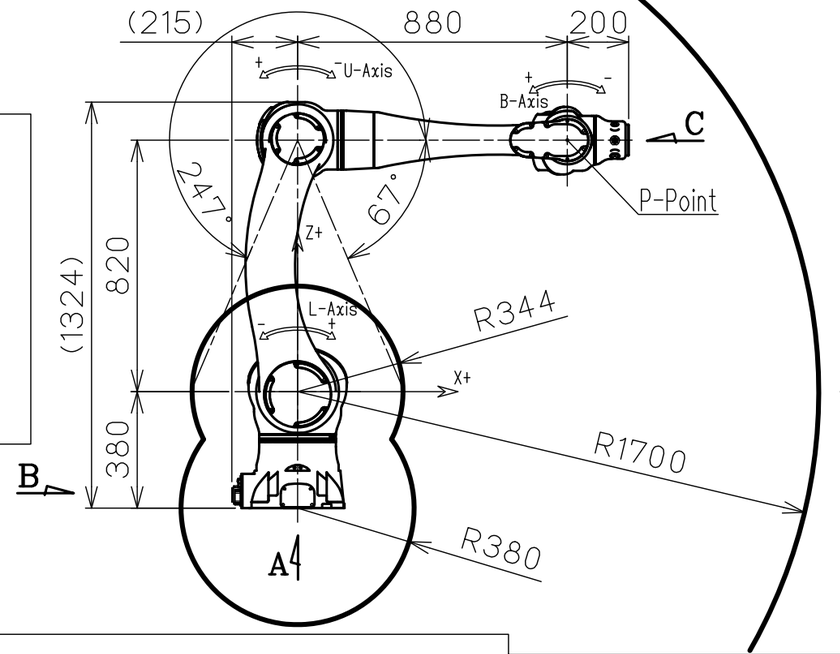


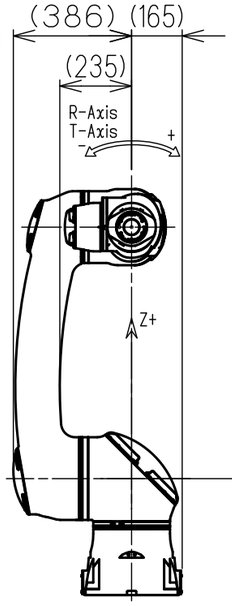


View C(Scale=1/5)



View D(Scale=1/5)

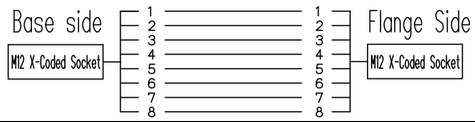




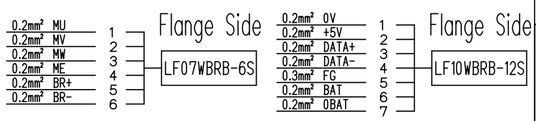
Item \ Model		Collaborative Robot MOTOMAN-HC20DT (Dust and Drip Proof)
Configuration		Vertically Articurated
Degree of Freedom		6
Payload		20kg
Repeatability *1		±0.15mm
Range of Motion	S-Axis (Turning)	-180° - +180° *3
	L-Axis (Lower Arm)	-180° - +180°
	U-Axis (Upper Arm)	-67° - +247°
	R-Axis (Roll)	-210° - +210°
	B-Axis (Pitch/Yaw)	-180° - +180°
	T-Axis (Twist)	-210° - +210°
Maximum Speed	S-Axis	1.40rad/s,80°/s
	L-Axis	1.40rad/s,80°/s
	U-Axis	2.09rad/s,120°/s
	R-Axis	2.27rad/s,130°/s
	B-Axis	3.14rad/s,180°/s
	T-Axis	3.14rad/s,180°/s
Allowable Moment	R-Axis	58.8N·m (6.0kgf·m)
	B-Axis	58.8N·m (6.0kgf·m)
	T-Axis	29.4N·m (3.0kgf·m)
Allowable Inertia ($GD^2/4$)	R-Axis	4.0 kg·m²
	B-Axis	4.0 kg·m²
	T-Axis	2.0 kg·m²
Approx. Robot Mass		140kg
Protected Structure		All axes: IP67
Cleanliness (Referance) *4		Equivalent to ISO Class 5
Mounting Method		Floor-mounted, Wall-mounted, Tilt-mounted, Ceiling-mounted
Ambient Conditions	Temperature	0 to 40° C
	Humidity	20 to 80%RH (Non-Condensing)
	Vibration	Less than 4.9m/s² (0.5G)
	Altitude	1000m or less
	Others	·Free from explosive gnd corrosive gas or liquid. ·Free from electrical noise. ·Free from strong magnetic fields.
Power Requirements		1.5kVA
Controller		YRC1000/YRC1000micro

*1 Repeatability is conformed to ISO 9283.
*2 The manipulator is in the home position.
*3 When the manipulator is installed on a tilt or a wall, the motion of S-axis will be limited.
*4 Cleanliness is for reference and not guaranteed.
*5 Tolerance is applied only to 12 dia.$^{+0.018}_{0}$ holes.

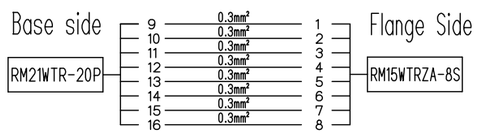
Detail of Ethernet Cable Connector



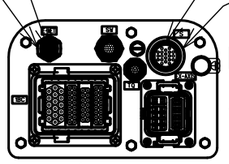
Detail of External Axis Cable Connector



Detail of I/O Cable Connector

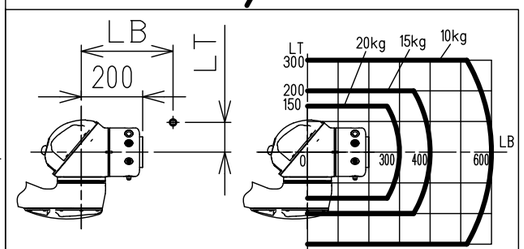


Main Key (Left and Lower-side)
Ethernet cable connector type is M12 X-coded socket. (with cap).
Matching connector type is M12 X-coded plug. (Provided by User)

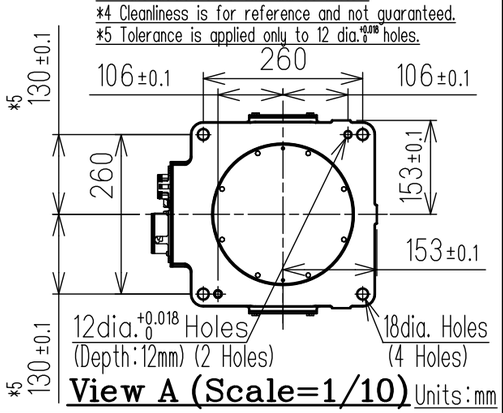


Main Key (Upper-side)
Internal I/O cable connector type is RM21WTR-20P (with cap).
Matching connector type is RM21WTP-20S or the equivalent. (Provided by User)

View B(Scale=1/5)



Allowable Wrist Load



View A (Scale=1/10) Units: mm

Note:
1. All rights reserved.
2. Please note that the data is subject to be deleted without advance notice.
3. No warranty is given in relation to the data including the specification.
4. We are not responsible for any damages or loss caused by the use of the data.

FOR STUDY PURPOSE ONLY

SCALE 1:20

YASKAWA
株式会社 安川電機

Reference Drawing

TITLE MOTOMAN-HC20DT (Dust and Drip Proof)
DIMENSION DIAGRAM

DRWN DATE Oct. 7. '19
DWG.NO. HW1386262

SIZE A3